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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/685,215

10/14/2003

William A. Welsh

67008-156PUS1;5691

4100

26096 7590 01/04/2011  
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EXAMINER

JOHNSON, VICKY A

ART UNIT

PAPER NUMBER

3656

MAIL DATE

DELIVERY MODE

01/04/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/685,215	<b>Applicant(s)</b> WELSH, WILLIAM A.	
	<b>Examiner</b> Vicky A. Johnson	<b>Art Unit</b> 3656	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-36 is/are pending in the application.
- 4a) Of the above claim(s) 11-21, 23, 24 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22, 25-27 and 29-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 10, 2010 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22, 25-27, and 29-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda (JP 61164109) in view of Perry (UD 6,813,973).

Ueda et al disclose a vibration isolation system for reducing vibrations in a rotating system rotatable about an axis of rotation, comprising: a multiple of masses (21a, 21b) disposed about an axis of rotation of a rotating system (see Fig 6); a drive system to independently spin each of said multiple of masses about said axis of rotation at an angular velocity (pg 12 lines 3-6); and a control system in communication with said

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drive system to control the angular velocity of each of said multiple of masses to reduce vibrations generated by of the rotating system (pg 5 lines 1-8).

Ueda does not disclose the multiple of masses radially offset from said axis of rotation from the axis of rotation.

Perry teaches the use of a multiple of masses (38, 52) radially offset from said axis of rotation from the axis of rotation (35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Ueda to include the rotatable masses as taught by Perry in order to increase the adjustability of the balance.

### ***Response to Arguments***

Some further comments regarding the applicant's comments are deemed appropriate.

The applicant argues that the rejection based on the combination of Ueda in view of Perry fails to meet the limitations of the claims because the Ueda reference does not "spin" the masses. The limitation "spin" is being interpreted as "to revolve or rotate rapidly, as the earth or a top." The Ueda reference therefore meets the limitations of the claims.

It is also argued that the combination of the references teaches away from the claimed invention. It is disagreed. Both references teach how to isolate or damp vibrations. The Perry reference is cited in order to teach a radial arm (50.39) radially offset from the axis of rotation (35), in order to increase the adjustability of the balance

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of the system. The Ueda reference teaches the control system, the drive system, and the multiple of masses (21a, 21b) disposed about an axis of rotation of a rotating system (see Fig 6).

The Perry reference is further argued against because it is argued that the balance components are rotationally fixed. As discussed above, the Perry reference is cited in order to teach a radial arm (50.39) radially offset from the axis of rotation (35), in order to increase the adjustability of the balance of the system.

Applicant's remarks have been accorded due consideration, however, they are not deemed fully persuasive.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vicky A. Johnson/  
Primary Examiner, Art Unit 3656